TECHNICAL DATA SHEET
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CONSOL ECOCRETE LF

A Self-Smoothening Polyurethane Topping

DESCRIPTION

A flow applied, self-smoothening 3 component polyurethane topping for thin layer application and repairs in matt finish. As a new topping over old or wore out polyurethane floors.

RECOMMENDED FOR

Hygienic floor for kitchen, wet areas, beverage processing and packaging plants. Chemical resistance floor for chemical process, contaminant area and wash down rooms. Thermal shock resistance floor for freezers, refrigerators, and oven installed spaces. Mechanically durable floor for loading docks and warehouse.

BENEFITS

CONSOL ECOCRETE LF bring some benefits such are:

- Excellent chemical resistance
- Resist bacterial growth, fungi, mould, and mildew
- Easily cleaned and maintained smooth seamless surface
- High-density systems with maximum wear, abrasion and impact resistant
- User-friendly, no-solvent odour during application
- One of the fastest "turn around time" polymer modified product which reduces cost
- High-temperature resistant up to 60 ^{0}C at 1.8 mm thickness
- Seamless without joints for optimum sanitation and hygienic finish.

TECHNICAL DATA

Colour
Standard **CONSOL ECOCRETE LF** color floor system is functionally formulated to with stand severe chemical, mechanical, and thermal damages. As a direct result light yellowing of the surface exposed to UV may occur specially in light colors (e.g. light grey) without affecting its functionality.

Finishing
Seamless matt, smooth finish

Chemical Base
Water based PU with selected aggregates

Density
~ 1.9 kg/mm/m^2

Layer Thickness
1.8 mm minimum

Compressive Strength
~ 40 N/mm^2 after 28 days

Flexural Strength
~ 16 N/mm^2 after 28 days

Bond Strength
~ 1.5 N/mm^2 (failure in concrete)

Shore D Hardness
> 80

Thermal Resistance
The product is not designed to with stand thermal shock

Service Temperature
The product is suitable for use when exposed to continuous temperature 0 – 60 ^{0}C

Chemical Resistance
CONSOL ECOCRETE LF will resist spillages of:

- Dilute and concentrated acids: hydrochloric, nitric, phosphoric and sulphuric
- Dilute and concentrated alkalis, including sodium hydroxide to 50% concentration
- Most dilute and concentrated organic acids
- Fats, oil and sugar
- Mineral oils, kerosene, gasoline, and brake fluids
- Most organic solvents.

Resistance is maintained in many cases to 60 ^{0}C, which should be regarded as the maximum service temperature.

Mixing Ratio
3 : 3 : 14 by weight of part A & part B & part C

Pot Life
18 min. at 30 ^{0}C
25 min. at 15 ^{0}C
35 min. at 8 ^{0}C

Packaging
20 kg/set

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CONCRETE SOLUTION

Storage & Shelf Life
6 months from the date of production, if stored properly in original, unopened and undamaged sealed container in dry condition between 10-32 ^{0}C. Protect from direct sunlight.

Estimate Coverage
1.9 kg/m^2 for 1 mm thickness

INSTRUCTION FOR USE
Primer (moisture <4%) : Consol Floor 161 ±0.3 kg/m^2+Quartz Sand (depends on substrate condition)
Primer (moisture >4%) : Consol Primer Hybrid Epoxy ±0.15 kg/m^2 (depends on substrate condition)
Top Coat : **CONSOL ECOCRETE LF** 3.5 kg/m^2

Surface Requirement and Preparation
Substrate will normally be concrete or polymer modified screeds with minimum compressive strength 25 N/mm^2 and pull-off strength 1.5 N/mm^2. If substrate moisture exceeds 6%, use CONSOL PRIMER HYBRID EPOXY as a moisture barrier. Preferably vacuum shot blast the surface with non-impact method. Concrete surface planner, grit blasting and surface grinding or other mechanical means until a profile is evident can be satisfactory. Substrate must be clean, free from dust, oil, water, paint residues, loose constituent or any contaminants. Prepare grooves, 5mm wide x 5mm deep, at all edges, by joints columns, doorways, and drains for anchoring purpose.

Mixing
Add part A, to a clean mixing drum. Add part B to the drum and mix for 10 second until uniform using helical spinner. Add the pigmented part C powder and further mix for 1 minute to achieve a fully homogenous consistent mortar. Scrap out residue of previous mix from the sides of the drum and discard before the next pack, stir mix well both contents with high speed mixer.

Application
Apply **CONSOL ECOCRETE LF** within its pot life. Spread the composite matrix to thickness 3-6 mm and consolidate with pin rake or notched squeegee set to the correct depth. Immediately release air by spike roller.

Temperature
CONSOL ECOCRETE LF should not be applied on material or floor temperatures below 10^0 C. Temperatures should not fall below 5 ^{0}C in the 24 hours after application. Service temperature is depending on thickness but may be up to 60 ^{0}C on intermittent splash. Not for immersion.

Substrate Movement
All moving joints must be carried through the **CONSOL ECOCRETE LF** and properly sealed. Construction joint sand cracks maybe covered but if substrate movement occurs, the **CONSOL ECOCRETE LF** will reflect the crack.

Curing

	25^{0}C	35^{0}C
Foot traffic. hr	10	8
Light traffic. hr	24	18
Full traffic. hr	48	24
Full Cure. days	7	5

CLEANING
Clean all tools with washing thinner or other solvents prior to material taking a hardest. Small unreacted part B in container to be decontaminated with a 5% solution of washing soda (sodium carbonate) prior to disposal. After material has set it is virtually impossible to get off and must wear off over time.

HEALTH & SAFETY
Some of the component of this product may be hazardous during mixing and application. Always use with suitable protective gears. Close container tightly after use. Keep out of reach of children.
For further information, refer to the product Material Safety Data Sheet, available upon request.